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SDIs in CAPlus  
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fields  
NEWS 12 AUG 02 CAPlus and CA patent records enhanced with European and Japan  
Patent Office Classifications  
NEWS 13 AUG 02 STN User Update to be held August 22 in conjunction with the  
228th ACS National Meeting  
NEWS 14 AUG 02 The Analysis Edition of STN Express with Discover!  
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STN Express with Discover! will change September 1, 2004  
  
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MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004  
  
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FILE 'HOME' ENTERED AT 10:13:22 ON 26 AUG 2004

=> index bioscience medicine

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INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE,  
AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS,  
BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB,  
CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 10:13:37 ON 26 AUG 2004

77 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view  
search error messages that display as 0\* with SET DETAIL OFF.

=> s (pdh? or pyruvat?(s)dehydrogenas?) (s) (brevi? or glutamic? or corynefor? or  
corynebacter? or arthrobact?)

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4 FILE DRUGU  
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64 FILES SEARCHED...

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127 FILE WPINDEX  
1 FILE NAPRALERT

47 FILES HAVE ONE OR MORE ANSWERS, 77 FILES SEARCHED IN STNINDEX

L1 QUE (PDH? OR PYRUVAT?(S) DEHYDROGENAS?) (S) (BREVI? OR GLUTAMIC? OR CORYNE  
FOR? OR CORYNEBACTER? OR ARTHROBACT?)

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INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE,  
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BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB,  
CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 10:13:37 ON 26 AUG 2004

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 1 FILE NAPRALERT

L1 QUE (PDH? OR PYRUVAT?(S) DEHYDROGENAS?) (S) (BREVI? OR GLUTAMIC

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F45	1	RDISCLOSURE
F46	1	WATER
F47	1	NAPRALERT

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FULL ESTIMATED COST

2.28

2.49

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GBN ----- GenBank Accession Number
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ORGN ---- Organism Name
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DT ---- Document Type
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FS ---- File Segment
GEN ---- Gene Name
ISSN ---- ISSN
JT ---- Journal Title
JTF ---- Full Journal Title
JTA ---- Abbreviated Journal Title
JTC ---- Journal Title Code
LA ---- Language
NA ---- Name used as Subject
NC ---- Number of Contract
NR ---- Number of Report
OS ---- Other Source
PY ---- Publication Year
TC ---- Treatment Code
TI ---- Title
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The sort fields available in the current file are:
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GBN ----- GenBank Accession Number
LOC ----- Locus
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FS ---- File Segment
GEN ---- Gene Name
ISSN ---- ISSN
JT ---- Journal Title
JTF ---- Full Journal Title
JTA ---- Abbreviated Journal Title
JTC ---- Journal Title Code
LA ---- Language
NA ---- Name used as Subject
NC ---- Number of Contract
NR ---- Number of Report
OS ---- Other Source
PY ---- Publication Year
TC ---- Treatment Code
TI ---- Title

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OCC --- Occurrence count of search terms in answer record  
ENTER SORT FIELDS AND SORT DIRECTION, OR (?):end

=> d ti 15 1-10

L5 ANSWER 1 OF 634 USPATFULL on STN  
TI DNA array sequence selection

L5 ANSWER 2 OF 634 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Production of L-**glutamic** acid by fermentation from  
**coryneform** bacteria with increased **gene** copy number  
encoding **pyruvate dehydrogenase**

L5 ANSWER 3 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Novel lysR2 gene of coryneform bacteria encoding LysR2 protein which is a  
transcription regulator, useful for fermentative production of L-lysine  
and L-valine and as a probe detecting polynucleotides encoding LysR2;  
bacterium recombinant protein production vector expression in host  
cell, for L-amino acid, L-lysine, L-valine production

L5 ANSWER 4 OF 634 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Corynebacterium thermoaminogenes genes for enzymes involved in amino acid  
biosynthesis, recombinant expression for L-amino acid biosynthesis

L5 ANSWER 5 OF 634 USPATFULL on STN  
TI Corynebacterium glutamicum genes encoding proteins involved in membrane  
synthesis and membrane transport

L5 ANSWER 6 OF 634 USPATFULL on STN  
TI Human genes and gene expression products

L5 ANSWER 7 OF 634 USPATFULL on STN  
TI Corynebacterium glutamicum genes encoding metabolic pathway proteins

L5 ANSWER 8 OF 634 CAPLUS COPYRIGHT 2004 ACS on STN  
TI **Genetic** variation in adenylate kinase 1, glyceraldehyde-3-  
phosphate **dehydrogenase**, and **glutamic-pyruvate**  
transaminase in the marsupial Monodelphis domestica

L5 ANSWER 9 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New isolated deformylase polypeptide encoding polynucleotide from  
coryneform bacteria which when present in attenuated form in L-lysine  
producing bacteria, results in increased fermentative production of  
L-lysine;  
recombinant enzyme gene, vector expression in host cell, fermentation  
for L-amino acid production

L5 ANSWER 10 OF 634 USPATFULL on STN  
TI Staphylococcus aureus polynucleotides and sequences

=> d 15 2 ibib abs

L5 ANSWER 2 OF 634 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2000:420833 CAPLUS  
DOCUMENT NUMBER: 133:57670  
TITLE: Production of L-**glutamic** acid by  
fermentation from **coryneform** bacteria with  
increased **gene** copy number encoding  
**pyruvate dehydrogenase**

INVENTOR(S): Kanno, Sohei; Kimura, Eiichiro; Matsui, Kazuhiko;  
Kurahashi, Osamu; Horino, Issei; Nakamatsu, Tsuyoshi

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: Eur. Pat. Appl., 32 pp.  
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1010755	A1	20000621	EP 1999-125302	19991217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000232890	A2	20000829	JP 1999-356035	19991215
BR 9906279	A	20010424	BR 1999-6279	19991217
CN 1270226	A	20001018	CN 1999-122969	19991218
PRIORITY APPLN. INFO.:			JP 1998-360619	A 19981218

AB A **coryneform** bacterium having enhanced intracellular **pyruvate dehydrogenase** activity which is obtained by increasing copy no. of a **gene** coding for intracellular **pyruvate dehydrogenase** and having L-glutamic acid-producing ability. The bacterium is cultured in a medium preferably contg. vitamin B1 at a concn. of 20 .mu.g/L or higher, so that L-glutamic acid should be accumulated in the medium, and L-glutamic acid is collected from the culture. Thus, the **gene** encoding the E1 subunit of **pyruvate dehydrogenase** from Escherichia coli or **Brevibacterium** lactofermentum is cloned into B. lactofermentum. According to the present invention, a bacterial strain having high L-glutamic acid-producing ability was been bred, and there is provided a method for efficiently producing L-glutamic acid at a low cost.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ti 15 6-20

- L5 ANSWER 6 OF 634 USPATFULL on STN  
TI Human genes and gene expression products
- L5 ANSWER 7 OF 634 USPATFULL on STN  
TI Corynebacterium glutamicum genes encoding metabolic pathway proteins
- L5 ANSWER 8 OF 634 CAPLUS COPYRIGHT 2004 ACS on STN  
TI **Genetic** variation in adenylate kinase 1, glyceraldehyde-3-phosphate **dehydrogenase**, and **glutamic-pyruvate** transaminase in the marsupial Monodelphis domestica
- L5 ANSWER 9 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New isolated deformylase polypeptide encoding polynucleotide from coryneform bacteria which when present in attenuated form in L-lysine producing bacteria, results in increased fermentative production of L-lysine;  
recombinant enzyme gene, vector expression in host cell, fermentation for L-amino acid production
- L5 ANSWER 10 OF 634 USPATFULL on STN  
TI Staphylococcus aureus polynucleotides and sequences
- L5 ANSWER 11 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Novel polynucleotide from Coryneform bacteria coding for hisC2 gene, useful as hybridization probe for detecting DNA to isolate nucleic acids, polynucleotides or genes coding for transcription regulator hisC2;  
vector-mediated gene transfer, expression in host cell and DNA probe for strain improvement, L-amino acid preparation, DNA microarray or DNA chip construction and RNA, cDNA or DNA detection
- L5 ANSWER 12 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New polynucleotides from coryneform bacteria, which code for the metY gene, useful in the fermentive preparation of L-amino acids, e.g. L-lysine or L-methionine, and as hybridization probes for discovering genes similar to metY gene;  
vector-mediated gene transfer and expression in Corynebacterium glutamicum for strain improvement
- L5 ANSWER 13 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Novel Coryneform bacteria polynucleotide sequence of ilvE gene which codes for transaminase E, the expression of which is enhanced, particularly over expressed, for fermentative preparation of L-leucine, L-valine;  
recombinant transaminase-E production and gene transfer for strain

improvement for L-leucine and L-valine production by fermentation

- L5 ANSWER 14 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New polynucleotide from Coryneform bacteria coding for C4-dicarboxylate transporter, useful for isolating nucleic acids, polynucleotides or genes which code for C4-dicarboxylate transporter gene;  
recombinant protein, vector expression in host cell, enzyme gene enhancement for L-amino acid production
- L5 ANSWER 15 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Novel polynucleotide from coryneform bacteria coding for phosphotransferase system enzyme I, useful for isolating nucleic acids, polynucleotides or genes which code for phosphotransferase system enzyme I;  
bacterium strain improvement useful for L-amino acid, especially L-lysine, production
- L5 ANSWER 16 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -
- L5 ANSWER 17 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -
- L5 ANSWER 18 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -
- L5 ANSWER 19 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -
- L5 ANSWER 20 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Fermentative preparation of L-amino acids, by fermenting coryneform bacteria in which gene coding for trehalose phosphatase, maltooligosyl-trehalose synthase and/or maltooligosyl-trehalose trehalohydrolase is attenuated;  
vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation

=> d ibib abs 15 11 16

L5 ANSWER 11 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
ACCESSION NUMBER: 2002-13086 BIOTECHDS  
TITLE: Novel polynucleotide from Coryneform bacteria coding for hisC2 gene, useful as hybridization probe for detecting DNA to isolate nucleic acids, polynucleotides or genes coding for transcription regulator hisC2;  
vector-mediated gene transfer, expression in host cell and DNA probe for strain improvement, L-amino acid preparation, DNA microarray or DNA chip construction and RNA, cDNA or DNA detection

AUTHOR: FARWICK M; HUTHMACHER K; BATHE B; PFEFFERLE W  
PATENT ASSIGNEE: DEGUSSA AG  
PATENT INFO: WO 2002020771 14 Mar 2002  
APPLICATION INFO: WO 2000-EP9037 9 Sep 2000  
PRIORITY INFO: DE 2001-1008838 23 Feb 2001  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
OTHER SOURCE: WPI: 2002-351778 [38]  
AN 2002-13086 BIOTECHDS  
AB DERWENT ABSTRACT:  
NOVELTY - An isolated polynucleotide (I) from **coryneform** bacteria comprising a polynucleotide sequence coding for the **hisC2 gene**, comprising a polynucleotide having at least 70% identity to a polynucleotide encoding a polypeptide comprising a sequence (S1) of 341 amino acids fully defined in the specification, is new.  
DETAILED DESCRIPTION - (I) comprises a polynucleotide having at least 70% identity to a polynucleotide encoding a polypeptide comprising



S1, a polynucleotide coding for a polypeptide comprising a sequence having at least 70% identity to S1, a polynucleotide complementary to the above polynucleotides, or a polynucleotide comprising at least 15 successive nucleotides of the above polynucleotides, where the polypeptide preferably has the activity of histidinol phosphate aminotransferase. INDEPENDENT CLAIMS are also included for the following: (1) a vector pCR2.1hisC2int, bearing a 467 base pair (bp) internal fragment of the hisC2 **gene**, the restriction map of which is fully defined in the specification, and which, in the *Escherichia coli* strain Top10/pCR2.1 hisC2int, is lodged under no. DSM13984 with the German Collection for Microorganisms and Cell Cultures; (2) an internal fragment of the hisC2 **gene** with a length of 467 bp; (3) a **coryneform** bacteria (II) in which the hisC2 **gene** is attenuated, preferably excluded; and (4) a **coryneform** bacteria containing a vector which bears parts of (I), but at least 15 successive nucleotides of the above said sequence.

WIDER DISCLOSURE - Polynucleotides consisting substantially of a polynucleotide sequence, that are obtainable by screening by hybridizing an appropriate **gene** library of **coryneform** bacterium that contains a complete **gene** or its part, with a probe that contains S2 or its fragment, and isolating the DNA sequence, are also disclosed.

BIOTECHNOLOGY - Preferred Polynucleotide: (I) is preferably a recombinant DNA replicable in **coryneform** bacteria, or a RNA. The replicable DNA comprises S2, at least one sequence that corresponds to S2 within the region of degeneration of the **genetic** code, at least one sequence that hybridizes with the sequences complementary to the above sequences, or a functionally neutral sense mutations in S2. The hybridization is carried out with a stringency corresponding to at most 2x saline sodium citrate (SSC).

USE - (I) is useful as hybridization probe in arrays, microarrays or DNA chips, for detecting RNA, cDNA and DNA in order to isolate nucleic acids, polynucleotides or **genes** that code for histidinol phosphate aminotransferase or that have a high similarity to the sequence of the hisC2 **gene**. (II), e.g. *Corynebacterium glutamicum* is useful for producing L-amino acids, in particular L-lysine, by fermentation of (II), enrichment of the L-amino acids in the medium or in the cells of the bacteria, and isolation of the L-amino acid. In (II), the **genes** of the biosynthesis pathway of the desired L-amino acid are enhanced, and the metabolic pathways that reduce the formation of the desired L-amino acid are at least partially excluded. The expression of polynucleotides that code for the hisC2 **gene** is attenuated, in particular, excluded. The catalytic properties of the polypeptide (enzyme protein) for which the polynucleotide hisC2 codes, are reduced. For the preparation of L-amino acids, **coryneform** microorganisms are fermented in which simultaneously one or more of the **genes** selected from the following group is/are enhanced or overexpressed. The **genes** include dapA **gene** coding for dihydrodipicolinate synthase, gap **gene** coding for glyceraldehyde-3-phosphate **dehydrogenase**, tpi **gene** coding for triosephosphate isomerase, pgk **gene** coding for 3-phosphoglycerate kinase, zwf **gene** coding for glucose-6-phosphate **dehydrogenase**, pyc **gene** coding for pyruvate carboxylase, mqo **gene** coding for malate quinone oxidoreductase, lysC **gene** coding for a feedback resistant aspartate kinase, lysE **gene** coding for lysine export, hom **gene** coding for homoserine **dehydrogenase**, ilvA **gene** coding for threonine dehydratase or the ilvA(Fbr) allele coding for feedback resistant threonine dehydratase, ilvBN **gene** coding for acetohydroxy acid dehydratase and zwal **gene** coding for the Zwal protein. One or more of the **genes** selected from pck **gene** coding for phosphoenol pyruvate carboxykinase, pgi **gene** coding for glucose-6-phosphate isomerase, poxB **gene** coding for pyruvate oxidase and zwa2 **gene** coding for the Zwa2 protein are simultaneously attenuated (all claimed). (I) is also useful as primers for use in polymerase chain reactions (PCR).

EXAMPLE - Chromosomal DNA from was isolated from *Corynebacterium glutamicum*, strain ATCC 13032. Oligonucleotides hisC2-int1 (5'-GCAGCTTTGAGGCTTATCC-3') and hisC2-int2 (5'-AGAATTCAAACGCAAGC-3') were selected for the polymerase chain

reaction (PCR) based on the sequence of **hisC2 gene**. The primers were synthesized and PCR was carried out by standard PCR method, using Taq polymerase. A 467 base pair long internal fragment of **hisC2 gene** was isolated. The amplified DNA fragment was ligated into vector pCR2.1-TOPO. *Escherichia coli* strain TOP10 was then electroporated with the ligation mix. Plasmid-carrying cells were selected by plating out the transformation mix onto Luria-Bertani (LB) agar supplemented with 50 mg/l of kanamycin. Plasmid DNA was isolated from a transformant, and was checked by restriction with restriction enzyme EcoRI followed by agarose gel electrophoresis (0.8%). The plasmid was named pCR2.1hisC2int. The vector pCR2.1hisC2int was electroporated into **Corynebacterium glutamicum DSM 5715**. The selection of clones with pCR2.1hisC2int integrated into the chromosome was made by plating out the electroporation mix onto LB agar that had been supplemented with 15 mg/l of kanamycin. (36 pages)

L5 ANSWER 16 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: AAA39445 DNA DGENE

TITLE: Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

INVENTOR: Kanno S; Kimura E; Matsui K; Kurahashi O; Horino I; Nakamatsu T

PATENT ASSIGNEE: (AJIN)AJINOMOTO CO INC.

PATENT INFO: EP 1010755 A1 20000621 32p

APPLICATION INFO: EP 1999-125302 19991217

PRIORITY INFO: JP 1998-360619 19981218

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 2000-389401 [34]

DESCRIPTION: B. lactofermentum pdhA gene PCR primer # 4.

AN AAA39445 DNA DGENE

AB **Coryneform** bacteria with enhanced intracellular **pyruvate dehydrogenase** activity have been produced. The bacteria was produced by increasing the copy number of an intracellular **pyruvate dehydrogenase gene**, thereby increasing the capacity of the transformed bacteria to produce L-glutamic acid. The **pyruvate dehydrogenase gene, pdhA**, was derived from **Brevibacterium lactofermentum** and the present sequence is a PCR primer used for amplifying the **pdhA gene**. The PCR product was used to produce a recombinant vector, carrying the **pdhA gene**, which can be used to transform **coryneform** bacteria. L-glutamic acid can be used as a food or a medicament.

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L5 ANSWER 20 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Fermentative preparation of L-amino acids, by fermenting coryneform bacteria in which gene coding for trehalose phosphatase, maltooligosyl-trehalose synthase and/or maltooligosyl-trehalose trehalohydrolase is attenuated;  
vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation

L5 ANSWER 21 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Novel polynucleotide from Coryneform bacteria coding for PPGK gene, useful as hybridization probe for detecting DNA to isolate nucleic acids, polynucleotides or genes coding for transcription activator ppgK;  
recombinant *Corynebacterium glutamicum* production useful for L-amino acid production, especially L-lysine production

L5 ANSWER 22 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

L5 ANSWER 23 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

L5 ANSWER 24 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

L5 ANSWER 25 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

L5 ANSWER 26 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

L5 ANSWER 27 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

L5 ANSWER 28 OF 634 USPATFULL on STN  
 TI Method of constructing amino acid producing bacterial strains, and method of preparing amino acids by fermentation with the constructed amino acid producing bacterial strains

L5 ANSWER 29 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

L5 ANSWER 30 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

L5 ANSWER 31 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New sigH gene from coryneform bacteria useful as a probe to isolate genes which code for sigma factor H, and overexpression of which gene in coryneform bacteria is useful for producing amino acids, especially L-lysine;  
 L-amino acid production by Corynebacterium glutamicum fermentation

L5 ANSWER 32 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New sigM gene from coryneform bacteria useful as probe to isolate genes which code for sigma factor M, and overexpression of which gene in coryneform bacteria is useful for producing amino acids, especially L-lysine;  
 L-amino acid production by Corynebacterium glutamicum fermentation

L5 ANSWER 33 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI Novel sahH gene from coryneform bacteria useful as probe to isolate genes coding for adenosyl homocysteinase, and overexpression of which gene in coryneform bacteria is useful for producing amino acids, e.g. L-lysine;  
 plasmid-mediated enzyme gene transfer and expression in Corynebacterium glutamicum for L-methionine production

L5 ANSWER 34 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New protein kinase B, pknB gene from corynebacteria, useful as hybridization probe and overexpression of which gene in corynebacteria is useful for producing L-amino acids, in particular L-lysine;  
 Corynebacterium sp. protein-kinase gene for use as a DNA probe or in production of L-lysine

L5 ANSWER 35 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New polynucleotide isolated from coryneform bacteria coding for the gap2 gene and a process for the fermentative preparation of amino acids using bacteria in which the gap2 gene is enhanced;  
 enhancing glyceraldehyde-3-phosphate-dehydrogenase activity in Corynebacterium glutamicum for L-amino acid production by fermentation

L5 ANSWER 36 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New polynucleotides isolated from coryneform bacteria coding for the clpC gene and a process for the fermentative preparation of amino acids using bacteria in which the clpC gene is attenuated;  
 vector-mediated gene transfer and expression in Corynebacterium glutamicum host cell for strain improvement and L-amino acid preparation

L5 ANSWER 37 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI Novel coryneform bacterium in which the gpsA gene encoding  
 glycerol-3-phosphate dehydrogenase is enhanced, useful for fermentative  
 production of L-amino acids such as L-lysine and L-glutamate;  
 vector plasmid pJCl-mediated gpsA gene transfer and expression in host  
 cell and fermentation for use in L-lysine and L-glutamic acid  
 preparation

L5 ANSWER 38 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI Preparing of L-amino acids, useful in human medicine, pharmaceutical  
 industry, foodstuff industry and in animal nutrition, by fermenting  
 coryneform bacteria containing attenuated malate enzyme;  
 L-amino acid production via bacterium culture for use in food and  
 pharmaceutical industry

L5 ANSWER 39 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New polynucleotides isolated from coryneform bacteria coding for the gpmB  
 gene and a process for the fermentative preparation of amino acids using  
 bacteria in which the gpmB gene is enhanced;  
 vector-mediated gene transfer and expression in Corynebacterium  
 glutamicum host cell for strain improvement and L-amino acid  
 preparation

L5 ANSWER 40 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI Polynucleotide from Coryneform bacteria coding for metR and/or metZ gene,  
 useful as a hybridization probe for isolating nucleic acids,  
 polynucleotides or genes which code for metR and/or metZ;  
 useful for L-amino acid and feedstuff production

L5 ANSWER 41 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New polynucleotide from coryneform bacteria coding for dep67 gene, where  
 overexpression of the gene provides improved production of L-amino acids  
 particularly L-lysine in corynebacterium glutamicum;  
 plasmid vector-mediated recombinant protein gene transfer and  
 expression in Escherichia coli, DNA primer, polymerase chain reaction,  
 DNA microarray, DNA chip, DNA probe and fermentation for use in  
 L-amino acid and L-lysine preparation

L5 ANSWER 42 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI Novel coryneform bacterium in which the plsC gene encoding  
 1-acyl-SN-glycerol-3-phosphate acyltransferase, is enhanced, useful for  
 fermentative production of L-amino acids such as L-lysine and  
 L-glutamate;  
 recombinant enzyme, vector expression in bacterium, promoter and  
 regulation region for food and pharmaceutical industry

L5 ANSWER 43 OF 634 CAPLUS COPYRIGHT 2004 ACS on STN  
 TI Ethanol biosynthetic production using recombinant coryneform bacteria  
 expressing pyruvate decarboxylase and alcohol dehydrogenase

L5 ANSWER 44 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New dead gene encoding polypeptide having activity of DNA/RNA helicase,  
 useful in bacteria for the fermentative preparation of L-amino acids,  
 particularly L-lysine, from glucose, molasses, starch, cellulose or  
 ethanol;  
 vector-mediated gene transfer and expression in Escherichia coli,  
 glucose, sucrose, lactose, fructose, molasses, starch, cellulose,  
 glycerol and ethanol fermentation and DNA microarray for use in  
 L-lysine and L-amino-acid preparation

L5 ANSWER 45 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New citB gene from coryneform bacteria useful as a probe to isolate genes  
 which code for the CitB protein, and attenuation of which gene in  
 coryneform bacteria is useful for producing amino acids, in particular  
 L-lysine;  
 L-amino acid production by fermentation of bacterium expressing the  
 transcription regulator citB protein

L5 ANSWER 46 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and

capable of producing L-glutamic acid, useful as a food or a medicament -

- L5 ANSWER 47 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New polynucleotides isolated from coryneform bacteria coding for the chrA gene and a process for the fermentative preparation of amino acids using bacteria in which the chrA gene are attenuated;  
vector plasmid pCR2-mediated chrA gene transfer and expression in Escherichia coli, fermentation, DNA primer, DNA probe, DNA chip and DNA microarray for use in L-lysine and L-amino-acid preparation, medicine and pharmaceutical industries and as feedstuff and food-additive
- L5 ANSWER 48 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New polynucleotides isolated from coryneform bacteria coding for the luxS gene and a process for the fermentative preparation of amino acids using bacteria in which the luxS gene are attenuated;  
vector plasmid pCR2-mediated chrA gene transfer and expression in Escherichia coli, fermentation, DNA primer, DNA probe, DNA chip and DNA microarray for use in L-lysine and L-amino-acid preparation, medicine and pharmaceutical industries and as feedstuff and food-additive
- L5 ANSWER 49 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New polynucleotides isolated from coryneform bacteria coding for the chrS gene and a process for the fermentative preparation of amino acids using bacteria in which the chrS gene are attenuated;  
enhancing histidine-kinase activity in Corynebacterium glutamicum useful for amino acid production by fermentation
- L5 ANSWER 50 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Novel isolated citA encoding polynucleotide from coryneform bacteria, useful as a probe, and which, when present in attenuated form in L-lysine producing bacteria, results in increased fermentative production of L-lysine;  
vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation
- L5 ANSWER 51 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Novel methH gene from coryneform bacteria, useful for producing L-methionine and as hybridization probes for identifying RNA, DNA or cDNA to isolate nucleic acids or genes encoding homocysteine methyltransferase II;  
vector-mediated gene transfer and expression in host cell, Escherichia coli fermentation broth, polymerase chain reaction and DNA primer for use in L-methionine preparation useful for homocysteine methyltransferase geneisolation
- L5 ANSWER 52 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Producing L-lysine by fermenting L-lysine producing coryneform bacteria sensitive to 4-hydroxydiaminopimelate, adding L-lysine in medium/bacterial cell, optionally isolating L-lysine/L-lysine-containing feedstuff additive;  
involving Corynebacterium glutamicum fermentation
- L5 ANSWER 53 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Novel polynucleotide from Coryneform bacteria coding for sigma factor E gene, useful as hybridization probe for isolating nucleic acids, polynucleotides or genes which code for sigE;  
Corynebacterium glutamicum strain improvement for increased L-amino acid production by fermentation
- L5 ANSWER 54 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New truB gene encoding polypeptide having activity of tRNA pseudouridine 55 synthase, useful in bacteria for fermentative preparation of L-amino acids, particularly L-lysine, from glucose, molasses, starch or ethanol;  
vector-mediated gene transfer and expression in Escherichia coli, glucose, sucrose, lactose, fructose, molasses, starch, cellulose, glycerol and ethanol fermentation, DNA microarray and DNA chip for use in L-lysine and L-amino-acid preparation
- L5 ANSWER 55 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN

TI Isolated polynucleotide from Coryneform bacteria, used for the fermentative production of L-amino acids, comprises a sequence coding for the mIkE17 gene;  
bacterium strain improvement and fermentation for foodstuff and pharmaceutical production

L5 ANSWER 56 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New coryneform bacterium in which the mdhA gene is attenuated, preferably eliminated, useful for fermentative production of L-amino acids such as L-lysine;  
malate-dehydrogenase gene transfer in Corynebacterium glutamicum, DNA array, DNA microarray and DNA chip useful for medicine, pharmaceutical, food industry and feedstuff

L5 ANSWER 57 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Preparing L-amino acids by fermenting coryneform bacteria transformed with the 6-phosphogluconate dehydrogenase gene is particularly useful to produce L-lysine and L-threonine -

L5 ANSWER 58 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Dehydrogenases for the synthesis of chiral compounds;  
a review

L5 ANSWER 59 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Novel polynucleotide from Coryneform bacteria coding for thyA gene, useful as hybridization probe for detecting DNA to isolate nucleic acids, polynucleotides or genes coding for thymidilate synthase;  
recombinant protein gene, vector expression in host cell, enzyme gene for L-amino acid production

L5 ANSWER 60 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Polynucleotides from Coryneform bacteria, coding for the enzymatic cobalt reducing gene product cobW, involved in the biosynthesis of L-amino acids (e.g. L-lysine);  
plasmid pCR2.1cobWint-mediated Corynebacterium glutamicum protein gene transfer and expression in bacterium for enzyme expression reduction and enhancement for amino acid production

L5 ANSWER 61 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New polynucleotides isolated from coryneform bacteria coding for the dep33 gene and a process for the fermentative preparation of amino acids using bacteria in which the dep33 gene are attenuated;  
gene overexpression in bacterium, useful for improved amino acid production

L5 ANSWER 62 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Preparing L-amino acids by fermenting coryneform bacteria transformed with the 6-phosphogluconate dehydrogenase gene is particularly useful to produce L-lysine and L-threonine -

L5 ANSWER 63 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Preparing L-amino acids by fermenting coryneform bacteria transformed with the 6-phosphogluconate dehydrogenase gene is particularly useful to produce L-lysine and L-threonine -

L5 ANSWER 64 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Preparing L-amino acids by fermenting coryneform bacteria transformed with the 6-phosphogluconate dehydrogenase gene is particularly useful to produce L-lysine and L-threonine -

L5 ANSWER 65 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Preparing L-amino acids by fermenting coryneform bacteria transformed with the 6-phosphogluconate dehydrogenase gene is particularly useful to produce L-lysine and L-threonine -

L5 ANSWER 66 OF 634 USPATFULL on STN  
TI Coryneform bacteria which produce chemical compounds I

L5 ANSWER 67 OF 634 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN  
TI Molecular cloning of the Corynebacterium glutamicum ('Brevibacterium

lactofermentum' AJ12036) odhA gene encoding a novel type of 2-oxoglutarate dehydrogenase.

- L5 ANSWER 68 OF 634 USPATFULL on STN  
TI Process for the preparation of L-amino acids using coryneform bacteria which contain an attenuated mez gene
- L5 ANSWER 69 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -
- L5 ANSWER 70 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -
- L5 ANSWER 71 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Isolated polynucleotide from Coryneform bacteria, used for the fermentative production of L-amino acids, comprises a sequence coding for the msik gene;  
recombinant protein gene, vector expression in host cell, culture medium fermentation and enzyme gene useful for foodstuff and human medicine
- L5 ANSWER 72 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New polynucleotide sequence encoding the sigC gene useful for preparation of L-amino acids e.g. lysine, and as hybridization probes for discovering RNA, cDNA and DNA to isolate genes which code for sigma factor C;  
L-amino acid production by fermentation of bacterium containing the sigma factor-C gene
- L5 ANSWER 73 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Production of L-lysine, comprises fermentation of L-lysine producing coryneform bacteria resistant to diaminopimelic acid analog, enrichment of L-lysine in medium, isolation of L-lysine or its feedstuffs additive from fermentation broth;  
involving culture medium optimization and fermentation
- L5 ANSWER 74 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Polynucleotide sequence encoding ndkA gene useful for preparation of L-amino acids e.g. L-lysine, and as hybridization probes for discovering RNA, cDNA and DNA to isolate genes encoding nucleotide diphosphate kinase;  
plasmid vector-mediated dihydrodipicolinate-synthase gene transfer and expression in Escherichia coli and DNA microarray and DNA chip for use in L-lysine and L-amino-acid preparation
- L5 ANSWER 75 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Fermentative production of L-amino acids, especially lysine or valine, by fermenting Coryneform bacteria in which the nadA and/or nadC gene is weakened;  
vector expression in bacterium host cell, fermentation and mutation for amino acid production and food
- L5 ANSWER 76 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Preparing L-lysine or L-threonine by the fermentation of coryneform bacteria comprises fragmenting L-lysine or L-threonine producing bacteria where the endogenous gene that codes for transketolase (tkt) is over-expressed;  
vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation
- L5 ANSWER 77 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New polynucleotides encoding glbO gene, useful as a primer for producing DNA of genes which code for the gene product of glbO, or as hybridization probes;  
vector-mediated gene transfer, expression in host cell, DNA probe and DNA primer for strain improvement
- L5 ANSWER 78 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Coryneform bacterium having enhanced pyruvate dehydrogenase activity, and capable of producing L-glutamic acid, useful as a food or a medicament -

L5 ANSWER 79 OF 634 USPATFULL on STN  
TI Targets for therapeutic intervention identified in the mitochondrial proteome

L5 ANSWER 80 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Polynucleotide sequence encoding metF gene useful for preparation of L-amino acids e.g. L-methionine and for the preparation of animal foodstuffs additive from the fermentation broth;  
vector-mediated gene transfer and expression in bacterium host cell for strain improvement and amino acid preparation

L5 ANSWER 81 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New polypeptides derived from 6-phosphogluconate dehydrogenase of Corynebacterium glutamicum used for increasing yield in fermentative production of useful substances e.g. L-amino acids;  
plasmid-mediated enzyme gene transfer and expression in Brevibacterium sp. or Microbacterium sp. for enhanced amino acid, vitamin or sugar production

L5 ANSWER 82 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 83 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 84 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI Fermentative production of L-threonine, useful in animal nutrition, comprises culturing enterobacterium with increased thrE gene activity;  
Escherichia coli fermentation containing deleted tdh gene and Corynebacterium glutamicum mutant thrE gene

L5 ANSWER 85 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
TI New nucleic acid molecule encoding replication protein/plasmid stability protein, useful in cloning and expression vectors, particularly shuttle vectors for expression of heterologous genes in Rhodococcus species;  
1-deoxy-D-xylulose-5-phosphate-synthase cloning in Rhodococcus sp.

L5 ANSWER 86 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 87 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 88 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 89 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 90 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 91 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -



L5 ANSWER 92 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 93 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 94 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 95 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 96 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 97 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 98 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN  
 TI Corynebacterium containing an amino-acid production gene comprising a modified promoter useful for high-yield fermentative production of amino acids -

L5 ANSWER 99 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI Polynucleotide sequence encoding metE gene useful for preparation of L-amino acids e.g. L-methionine and for the preparation of animal foodstuffs additive from the fermentation broth;  
     vector-mediated gene transfer and expression in host cell for strain improvement and amino acid preparation

L5 ANSWER 100 OF 634 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN  
 TI New isolated polynucleotide encoding L-amino acids from coryneform bacteria, useful in human medicine and the pharmaceuticals industry, and particularly in animal nutrition;  
     vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation

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L5 ANSWER 28 OF 634 USPATFULL on STN  
 ACCESSION NUMBER: 2004:2122 USPATFULL  
 TITLE: Method of constructing amino acid producing bacterial strains, and method of preparing amino acids by fermentation with the constructed amino acid producing bacterial strains

INVENTOR(S): Asakura, Yoko, Kawasaki-Shi, JAPAN  
 Nakamura, Jun, Kawasaki-Shi, JAPAN  
 Kanno, Sohei, Kawasaki-Shi, JAPAN  
 Suga, Mikiko, Kawasaki-Shi, JAPAN  
 Kimura, Eiichiro, Kawasaki-Shi, JAPAN  
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 Matsui, Kazuhiko, Kwasaki-shi, JAPAN  
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 Nakamatsu, Tsuyoshi, Kawasaki-shi, JAPAN  
 Kurahashi, Osamu, Kawasaki-shi, JAPAN

NUMBER KIND DATE

PATENT INFORMATION: US 2004002143 A1 20040101  
 APPLICATION INFO.: US 2000-577005 A1 20000525 (9)  
 RELATED APPLN. INFO.: Continuation of Ser. No. WO 1999-JP5175, filed on 22  
 Sep 1999, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-271786	19980925
	JP 1998-271787	19980925
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	2920	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of producing coryneform bacteria having an improved amino acid-  
 or nucleic acid-productivity comprises the steps of introducing a  
 mutation in a promoter sequence of amino acid- or nucleic  
 acid-biosynthesizing genes on a chromosome of a coryneform bacterium to  
 make it close to a consensus sequence or introducing a change in a  
 promoter sequence of amino acid- or nucleic acid-biosynthesizing genes  
 on a chromosome of a coryneform bacterium by gene recombination to make  
 it close to a consensus sequence, to obtain mutants of the coryneform  
 amino acid- or nucleic acid-producing microorganism, culturing the  
 mutants and select a mutant capable of producing the intended amino acid  
 or nucleic acid in a large amount. This method can construct a mutant  
 capable of suitably enriching or controlling the expression of an  
 intended gene without using a plasmid and also capable of producing  
 amino acids in a high yield, by the recombination or mutation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 93 OF 634 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: AAA29940 DNA DGENE

TITLE: Corynebacterium containing an amino-acid production gene  
 comprising a modified promoter useful for high-yield  
 fermentative production of amino acids -

INVENTOR: Asakura Y; Nakamura J; Kanno S; Suga M; Kimura E; Ito H;  
 Matsui K; Ohsumi T; Nakamatsu T; Kurahashi O

PATENT ASSIGNEE: (AJIN)AJINOMOTO CO INC.

PATENT INFO: WO 2000018935 A1 20000406 98p

APPLICATION INFO: WO 1999-JP5175 19990922

PRIORITY INFO: JP 1998-271786 19980925

JP 1998-271787 19980925

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

OTHER SOURCE: 2000-293168 [25]

DESCRIPTION: Mutagenic primer for mutation of pdhA promoter.

AN AAA29940 DNA DGENE

AB This sequence represents a primer used to mutate the promoter sequence of  
 the **pyruvate dehydrogenase (pdhA)**  
**gene**. The primer is used in the method of the invention. The  
 invention relates to a method for the production of a bacterial strain  
 with improved amino or nucleic acid production. The method comprises  
 mutating or **genetically** recombining the promoter sequence of an  
 amino or nucleic acid biosynthesis **gene** on a  
**Corynebacterium** chromosome, culturing the mutants and selecting  
 for high amino or nucleic acid yield. The invention also includes  
**Corynebacterium** strains containing a **glutamic** acid or  
 arginine synthesis **gene** with the mutated promoter. Also  
 included is a method for the production of L-**glutamic** acid by  
 culturing an L-**glutamic** acid producing strain of  
**Corynebacterium** which is tolerant to 4-fluoroglutamic acid. The  
 methods can be used to increase the yield of amino acids such as  
**glutamic** acid and arginine by fermentative production.

=> d his

(FILE 'HOME' ENTERED AT 10:13:22 ON 26 AUG 2004)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE,  
AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS,  
BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB,  
CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 10:13:37 ON 26 AUG 2004  
SEA (PDH? OR PYRUVAT?(S)DEHYDROGENAS?) (S) (BREVI? OR GLUTAMIC?

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1 FILE ADISNEWS  
15 FILE AGRICOLA  
2 FILE ANABSTR  
4 FILE AQUASCI  
20 FILE BIOBUSINESS  
35 FILE BIOENG  
171 FILE BIOSIS  
163 FILE BIOTECHABS  
163 FILE BIOTECHDS  
51 FILE BIOTECHNO  
63 FILE CABA  
9 FILE CANCERLIT  
209 FILE CAPLUS  
13 FILE CEABA-VTB  
1 FILE CROPB  
1 FILE CROPU  
5 FILE DISSABS  
6 FILE DDFB  
1 FILE DDFU  
284 FILE DGENE  
6 FILE DRUGB  
4 FILE DRUGU  
1 FILE EMBAL  
123 FILE EMBASE  
44 FILE ESBIODBASE  
2\* FILE FEDRIP  
4 FILE FROSTI  
25 FILE FSTA  
65 FILE GENBANK  
1 FILE HEALSAFE  
44 FILE IFIPAT  
11 FILE JICST-EPLUS  
66 FILE LIFESCI  
53 FILE MEDLINE  
14 FILE NIOSHTIC  
5 FILE NTIS  
2 FILE OCEAN  
46 FILE PASCAL  
1 FILE RDISCLOSURE  
78 FILE SCISEARCH  
75 FILE TOXCENTER  
204 FILE USPATFULL  
12 FILE USPAT2  
1 FILE WATER  
127 FILE WPIDS  
127 FILE WPINDEX  
1 FILE NAPRALERT

L1 QUE (PDH? OR PYRUVAT?(S) DEHYDROGENAS?) (S) (BREVI? OR GLUTAMIC

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FILE 'DGENE, CAPLUS, USPATFULL, BIOSIS, BIOTECHDS, WPIDS, EMBASE,  
SCISEARCH, TOXCENTER, LIFESCI, GENBANK, CABA, MEDLINE' ENTERED AT  
10:16:14 ON 26 AUG 2004

L2 1681 S (PDH? OR PYRUVAT?(S)DEHYDROGENAS?) (S) (BREVI? OR GLUTAMIC? O  
L3 798 S L2 (S) GENE?  
L4 634 DUP REM L3 (164 DUPLICATES REMOVED)  
L5 634 FOCUS L4 1-

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COST IN U.S. DOLLARS

SINCE FILE TOTAL  
ENTRY SESSION